

Claim Amendments

Please cancel all claims and add the following new claims.

--56. (new) An immunological assay for the detection and/or quantification of human MDA-modified LDL (malondialdehyde-modified low density lipoprotein) and human OxLDL (oxidized low density lipoprotein) in a sample derived from the body fluids or tissues of a human being, said assay comprising:

(a) contacting the sample with a first antibody that has high affinity for human MDA-modified LDL and human OxLDL; and

(b) thereafter visualizing and/or quantifying a binding reaction between the first antibody and the MDA-modified LDL and OxLDL present in the sample;

wherein the MDA-modified LDL and OxLDL for which the first antibody has high affinity contain at least 60 substituted lysine moieties per apo B-100 (apolipoprotein B-100) moiety.

57. (new) The assay of claim 56 in which the MDA-modified LDL and OxLDL for which the first antibody has high affinity contain at least about 90 substituted lysine moieties per apo B-100 moiety.

58. (new) The assay of claim 56 in which the MDA-modified LDL and OxLDL for which the first antibody has high affinity contain at least about 120 substituted lysine moieties per apo B-100 moiety.

59. (new) The assay of claim 56 in which the MDA-modified LDL and OxLDL for which the first antibody has high affinity contain at least about 210 substituted lysine moieties per apo B-100 moiety.

60. (new) The assay of claim 56 in which the MDA-modified LDL and OxLDL for which the first antibody has high affinity contain at least about 240 substituted lysine moieties per apo B-100 moiety.

61. (new) The assay of claim 56 which is a competitive assay.

62. (new) The competitive assay of claim 61 in which MDA-modified LDL and/or OxLDL are bound to a substrate, comprising contacting the sample and the first antibody with the substrate having bound to it MDA-modified LDL and OxLDL.

63. (new) The assay of claim 56 which is a sandwich assay in which the first antibody is bound to a substrate, comprising contacting the sample with the substrate having bound to it the first antibody.

64. (new) The assay of claim 63 in which a second antibody is used and the second antibody has high affinity for human MDA-modified LDL and human OxLDL.

65. (new) The assay of claim 64 in which the second antibody has high affinity for human native LDL (low density lipoprotein).

66. (new) The assay of claim 56 which is an immunohistochemical assay in which the sample is a tissue sample and it is contacted with the first antibody.

67. (new) The assay of claim 56 in which the affinity constant of the first antibody for MDA-modified LDL and for OxLDL is at least about $1 \times 10^{10} \text{ M}^{-1}$.

68. (new) The assay of claim 56 in which the first antibody has low affinity for human native LDL.

69. (new) The assay of claim 68 in which the affinity constant of the first antibody for human native LDL is less than about $1 \times 10^6 \text{ M}^{-1}$.

70. (new) The assay of claim 64 in which the affinity constant of the second antibody for MDA-modified LDL and for OxLDL is at least about $1 \times 10^{10} \text{ M}^{-1}$.

71. (new) The assay of claim 70 in which the affinity constant of the second antibody for human native LDL is at least about $1 \times 10^9 \text{ M}^{-1}$.

72. (new) The assay of claim 71 in which the second antibody is the monoclonal antibody mAb-8A2 produced by hybridoma Hyb8A2 deposited at the BCCM under deposit accession number LMBP 1661 CB on April 24, 1997.

73. (new) The assay of claim 56 in which the sample is derived from the body fluids of a human being.

74. (new) The assay of claim 56 in which at least one antibody is capable of detecting 0.02 mg/dl of human MDA-modified LDL and human OxLDL in undiluted human plasma.--